



*AMENDMENTS TO THE CLAIMS*

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of creating thermal functional designs of articles of clothing using a computer and a display monitor controlled by the computer, the method comprising:

with the aid of an apparel computer aided design function, entering designs of articles of clothing in a pattern database;

supplying the computer with information from databases relating to thermal and physiological characteristics of a human body and thermal characteristics of respective textile materials for making the articles of clothing;

with the computer and using the pattern database, simulating thermal functional performance of the articles of clothing; and

creating visual images displayed on the monitor, visualizing thermal functional performance of the designs of the articles of clothing.

2. (Previously Presented) The method according to claim 1, in which the database of the physiological characteristics of a human body comprises human model data for specific body characteristics, including size and shape.

3. (Previously Presented) The method according to claim 1, in which the database of thermal characteristics of respective textile materials comprises product specification data.

4. (Previously Presented) The method according to claim 1, in which the database of thermal characteristics of the human body comprises thermal property data, including thermo-physiological and thermal comfort data of the human body.

5. (Previously Presented) The method according to claim 1, in which the database of the thermal characteristics of textile materials comprises thermal property data, including data for fibres, yarns, fabrics, and garments.

6. (Previously Presented) A method of creating thermal functional designs of articles of clothing, the method comprising:

extracting a pattern for an article of clothing from a pattern database;

selecting thermal-physiological characteristics of the human body from a body database;

selecting thermal characteristics of a textile material from a textile database; and

simulating fitting on the human body of the article of clothing made from the textile selected and, using the thermal-physiological characteristics selected, displaying a visual image of thermal comfort of a human wearing the article of clothing made from the textile, visualizing thermal functional performance of the article of clothing.

7. (Previously Presented) The method according to claim 6 wherein the textile database includes thermal property data for textile fibers, yarns, and fabrics.